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EXAMINER	
GILES, NICHOLAS G	

ART UNIT	PAPER NUMBER
2622	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/783,378	NEVEN, HARTMUT	
	Examiner	Art Unit	
	NICHOLAS G. GILES	2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *14 January 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-31* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-31* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *18 October 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *01/08/2008*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 01/14/2008 have been fully considered but they are not persuasive.

Applicant argues that the amended claims limitation search engine is not covered by Boncyk. The examiner disagrees and point to the fact that the content server contains a search engine that searches for information on the image as claimed.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims **11-16, 25, and 28** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

4. Claims **11 and 25** recite the limitation "the storage medium". There is insufficient antecedent basis for this limitation in the claims.

Claims **12-16** depend on claim 11 and therefore are rejected.

5. Claim **28** recites the limitation "the manufactured product". There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

6. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

7. Claims **1-8, 11-15, 17-19, and 21-28** are rejected under 35 U.S.C. 102(e) as being anticipated by Boncyk et al. (WO 03/041000).

Regarding claim **1**, Boncyk et al. discloses:

> A system for image-based information retrieval from search engines, characterized by a) a terminal with a built-in camera that is connected to a remote data transmission network (8:22-10:5); b) a server computer on which an object recognition program is running, which analyses images sent to it and provides them with a symbolic indexing (37:30-38:1 and 18:6-10); c) a search engine that uses the indexed image to find information about the image and sends it back to the terminal (37:30-38:1 and 18:6-10).

Regarding claim **2**, see the rejection of claim 1 and note that Boncyk et al. further discloses:

> The system as described under 1) that is designed for mobile telephones or portable computers that have a built-in camera (6:7-19).

Regarding claim **3**, see the rejection of claim 1 and note that Boncyk et al. further discloses:

A city or museum guide that uses the system described under 2) to provide a user with information about objects of which he or she has previously taken a picture (2:5-7).

Regarding claim **4**, see the rejection of claim 3 and note that Boncyk et al. further discloses:

The system as described under 3) in which positioning information is also used to appropriately limit the image recognition system (27:36-28:14).

Regarding claim **5**, see the rejection of claim 2 and note that Boncyk et al. further discloses:

The system as described under 2) that provides product information about products that have been previously photographed with the mobile camera (27:36-28:14).

Regarding claim **6**, see the rejection of claim 2 and note that Boncyk et al. further discloses:

The system as described under 2) in which the image recognition system is also able to recognize text characters or symbols (27:36-28:14).

Regarding claim **7**, see the rejection of claim 2 and note that Boncyk et al. further discloses:

The system as described under 2) in which the system is, in particular, able to recognize faces (27:7-9).

Regarding claim **8**, see the rejection of claim 2 and note that Boncyk et al. further discloses:

> The system as described under 2) that is used to provide the user with additional information about advertising billboards (39:18-24).

Regarding claim **11**, Boncyk et al. discloses:

> A computer implemented system for image-based searching, comprising: a computer server, communicatively coupled with a network, that receives an input image from a user device communicatively coupled with the network (8:22-10:5); an image recognition system executed by the computer server and adapted to: determine a plurality of graphical attributes of the input image (37:30-38:1 and 18:6-10); match the input image to a reference image from a plurality of reference images stored in the storage medium (15:1-15:35), based on the plurality of graphical attributes of the input image and the reference images, each of the reference images having an associated symbolic identifier (37:30-38:1); and associate a symbolic identifier to the input image based on the symbolic identifier associated with the matching reference image (37:30-38:1); a search engine executed by the computer server and adapted to receive a query and to retrieve a set of search results associated with the query (9:40-10:5, URL); and a query processing system executed by the computer server and adapted to: receive the symbolic identifier of the input image from the image recognition system (9:40-10:5, URL); provide

the symbolic identifier to the search engine as a query, and to receive a set of search results associated with the symbolic identifier (URL lookup 9:40-10:5); and transmit, via the network, a plurality of the search results to the user device (9:40-10:5 and 25:1-40).

Regarding claim **12**, see the rejection of claim 11 and note that Boncyk et al. further discloses:

User device comprises a mobile telephone having an integrated camera (6:7-19).

Regarding claim **13**, see the rejection of claim 11 and note that Boncyk et al. further discloses:

Server receives a geographic location of the user device in association with the input image (27:36-28:14); and the image recognition system is further adapted to match the input image to a reference image from the plurality of reference images based on the geographic location of the user device (27:36-28:14).

Regarding claim **14**, see the rejection of claim 11 and note that Boncyk et al. further discloses:

Image recognition system further includes a character recognition system (27:36-28:14).

Regarding claim **15**, see the rejection of claim 11 and note that Boncyk et al. further discloses:

Image recognition system further includes a facial recognition system (27:7-9).

Regarding claim **17**, Boncyk et al. discloses:

A computer implemented method for image-based searching, comprising: receiving at a computer server, an input image from a user device remotely located from the server (8:22-10:5); providing from the computer server the input image to an image recognition system (37:30-38:1 and 18:6-10); receiving at the computer server from the image recognition system a symbolic identifier associated with the input image (9:40-10:5, URL); providing from the computer server the symbolic identifier to a search engine as a query (9:40-10:5, URL); receiving at the computer server from the search engine a set of search results associated with the symbolic identifier (URL lookup 9:40-10:5); and transmitting from the computer server a plurality of the search results to the user device (URL lookup 9:40-10:5).

Regarding claim **18**, Boncyk et al. discloses:

A computer implemented method for image-based searching at a computer server, the method comprising: receiving an input image from a user device remotely located from the server (8:22-10:5); determining a plurality of graphical attributes represented in the input image (37:30-38:1 and 18:6-10); matching the input image to a reference image from a plurality of reference images stored in a storage medium, based on the

plurality of graphical attributes of the input image and the reference images (15:1-15:35), each of the reference images having an associated symbolic identifier (37:30-38:1); and associating a symbolic identifier to the input image based on the symbolic identifier associated with the matching reference image (37:30-38:1); processing the symbolic identifier as search query to retrieve, from a search engine, a set of search results associated with the symbolic identifier (URL lookup 9:40-10:5); and transmitting a plurality of the search results to the user device (URL lookup 9:40-10:5).

Regarding claim **19**, see the rejection of claim 18 and note that Boncyk et al. further discloses:

User device comprises a mobile telephone having an integrated camera (6:7-19).

Regarding claim **21**, see the rejection of claim 18 and note that Boncyk et al. further discloses:

Receiving a geographic location of the user device through the network (27:36-28:14).

Regarding claim **22**, see the rejection of claim 21 and note that Boncyk et al. further discloses:

Image recognition system is further adapted to match the input image to a reference image from the plurality of reference images based on the geographic location of the user device (27:36-28:14).

Regarding claim **23**, see the rejection of claim 18 and note that Boncyk et al. further discloses:

> Image recognition system further includes a character recognition system (27:36-28:14).

Regarding claim **24**, see the rejection of claim 18 and note that Boncyk et al. further discloses:

> Image recognition system further includes a facial recognition system (27:7-9).

Regarding claim **25**, see the rejection of claim 18 and note that Boncyk et al. further discloses:

> Image recognition system is further adapted to enable transmission of reference images, for use by the image recognition system, to the storage medium (8:22-10:5).

Regarding claim **26**, see the rejection of claim 18 and note that Boncyk et al. further discloses:

> Selecting a matching reference image from a plurality of reference images stored in a storage medium comprises: determining the graphical attributes in the input image represented by a plurality of trained attribute detectors (9:32-10:2); aggregating a plurality of confidence values received from the plurality of trained attribute detectors (9:32-10:2 and 17:5-18:10); and determining the matching reference image where the

aggregated plurality of confidence values exceed a predetermined threshold value (best match, 9:32-10:2).

Regarding claim **27**, see the rejection of claim 18 and note that Boncyk et al. further discloses:

Search results comprise links to websites (9:32-10:5), contact information (36:18-21), product information (40:24-27), translations of recognized characters (27:36-28:14), and other information related to the input image (39:18-24).

Regarding claim **28**, Boncyk et al. discloses:

A computer implemented method for image-based searching of product information (40:24-27), comprising: receiving an input image from a user device remotely located from the computer server (8:22-10:5); processing the input image of the manufactured product on an image recognition system to obtain a symbolic identifier identifying the manufactured product in the input image (symbols, 9:12-31), the symbolic identifier comprising at least one of a product name or a product identification number, or a product code (9:12-31); providing the symbolic identifier associated with the input image to the search engine as a query (decode symbol 9:12-31); receiving a set of search results associated with the symbolic identifier, the search results including at least one document descriptive of the manufactured product in the input image (numerals or

text information, 9:12-31, 40:24-27); and transmitting via the network, a plurality of the search results to the user device (37:30-38:1).

Claim Rejections - 35 USC § 103

8. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

9. Claims **9, 10, 16, and 20** are rejected under 35 U.S.C. 103(a) as being unpatentable over Boncyk et al.

Regarding claim **9**, see the rejection of claims 1 and 2 and note that Boncyk et al. further discloses in 40:24-27 that an image can be taken and used to retrieve maintenance instructions or repair history of a part of an aircraft. Official Notice is taken that it was well known at the time the invention was made to organize maintenance instructions for a part of a device into the form of a handbook, which would contain further maintenance instructions for other parts of the device. An advantage to doing so is that instructions for the device are organized for a person who desires to do further maintenance on different parts of the same device. For this reason it would have been obvious to one of ordinary skill in the art at the time the invention was made to have Boncyk include organizing maintenance instructions for a part of a device into the form of a handbook.

It is noted by the examiner that because the applicant has failed to timely traverse the old and well-known statement above, it is now taken as admitted prior art. See MPEP 2144.03(c).

Regarding claim **10**, see the rejection of claim 2 and note that Boncyk et al. is silent with regards to allowing providers of information to make new entries to the system so that their data can be retrieved. Official Notice is taken that it was well known at the time the invention was made to update databases with new information. An advantage to doing so is that the person deciding to access the database will have the most up to date information available. For this reason it would have been obvious to one of ordinary skill in the art at the time the invention was made to have Boncyk include allowing providers of information to make new entries to the system so that their data can be retrieved.

It is noted by the examiner that because the applicant has failed to timely traverse the old and well-known statement above, it is now taken as admitted prior art. See MPEP 2144.03(c).

Regarding claim **16**, see the rejection of claim 11 and note that Boncyk et al. is silent with regards to updating the images and allowing future searching to include searching the updated images. Official Notice is taken that it was well known in the art at the time the invention was made to update image databases with new images that can be searched. An advantage to doing so is that the person deciding to access the database will have the most up to date information available. For this reason it would have been obvious to one of ordinary skill in the art at the time the invention was made to have Boncyk include allowing providers of information to make new entries to the system so that their data can be retrieved.

Regarding claim **20**, see the rejection of claim 18 and note that Boncyk et al. is silent with regards to updating the images and allowing future searching to include searching the updated images. Official Notice is taken that it was well known in the art at the time the invention was made to update image databases with new images that can be searched. An advantage to doing so is that the person deciding to access the database will have the most up to date information available. For this reason it would have been obvious to one of ordinary skill in the art at the time the invention was made to have Boncyk include allowing providers of information to make new entries to the system so that their data can be retrieved.

10. Claims **29-31** are rejected under 35 U.S.C. 103(a) as being unpatentable over Boncyk et al. in view of Waibel (U.S. Pub. No. 2003/0164819).

Regarding claim **29**, see the rejection of claim 28 and note that Boncyk et al. is silent with regards to using the method for identification of buildings name and information about buildings. Waibel discloses this in ¶0057 and ¶0061-0062. This is advantageous in that the user can annotate the images with the name and/or location for storage in a photo album. For this reason it would have been obvious to one of ordinary skill in the art at the time the invention was made to have Boncyk et al. include using the method for identification of buildings name and information about buildings.

Regarding claim **30**, Boncyk discloses:

> A computer implemented method for image-based language recognition, comprising: receiving an input image from a user device

remotely located from the computer server (8:22-10:5); processing the input image on a character recognition system, executed by the computer server to obtain text data indicative of the text (27:36-28:14); and transmitting, via the network, the text to the user device (37:30-38:1).

Boncyk et al. is silent with regards to inputting the text in one language and outputting a translation of the text in a second user language. Waibel discloses this in ¶0028. This is advantageous in that a user can identify a building or read a sign that the user is interested in knowing information about. For this reason it would have been obvious to one of ordinary skill in the art at the time the invention was made to have Boncyk et al. include inputting the text in one language and outputting a translation of the text in a second user language.

Regarding claim **31**, see the rejection of claims 29, 11, and 15 and note that Boncyk et al. is silent with regards to providing the name and information about the name. Waibel discloses this in ¶0058. This is advantageous in that the person's favorite foods, likes, and dislikes etc. can be ascertained. For this reason it would have been obvious to one of ordinary skill in the art at the time the invention was made to have Boncyk et al. include providing the name and information about the name.

Conclusion

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to NICHOLAS G. GILES whose telephone number is (571)272-2824. The examiner can normally be reached on Monday through Friday from 7:30am to 4:00pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lin Ye can be reached on (571) 272-7372. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Lin Ye/
Supervisory Patent Examiner, Art Unit 2622